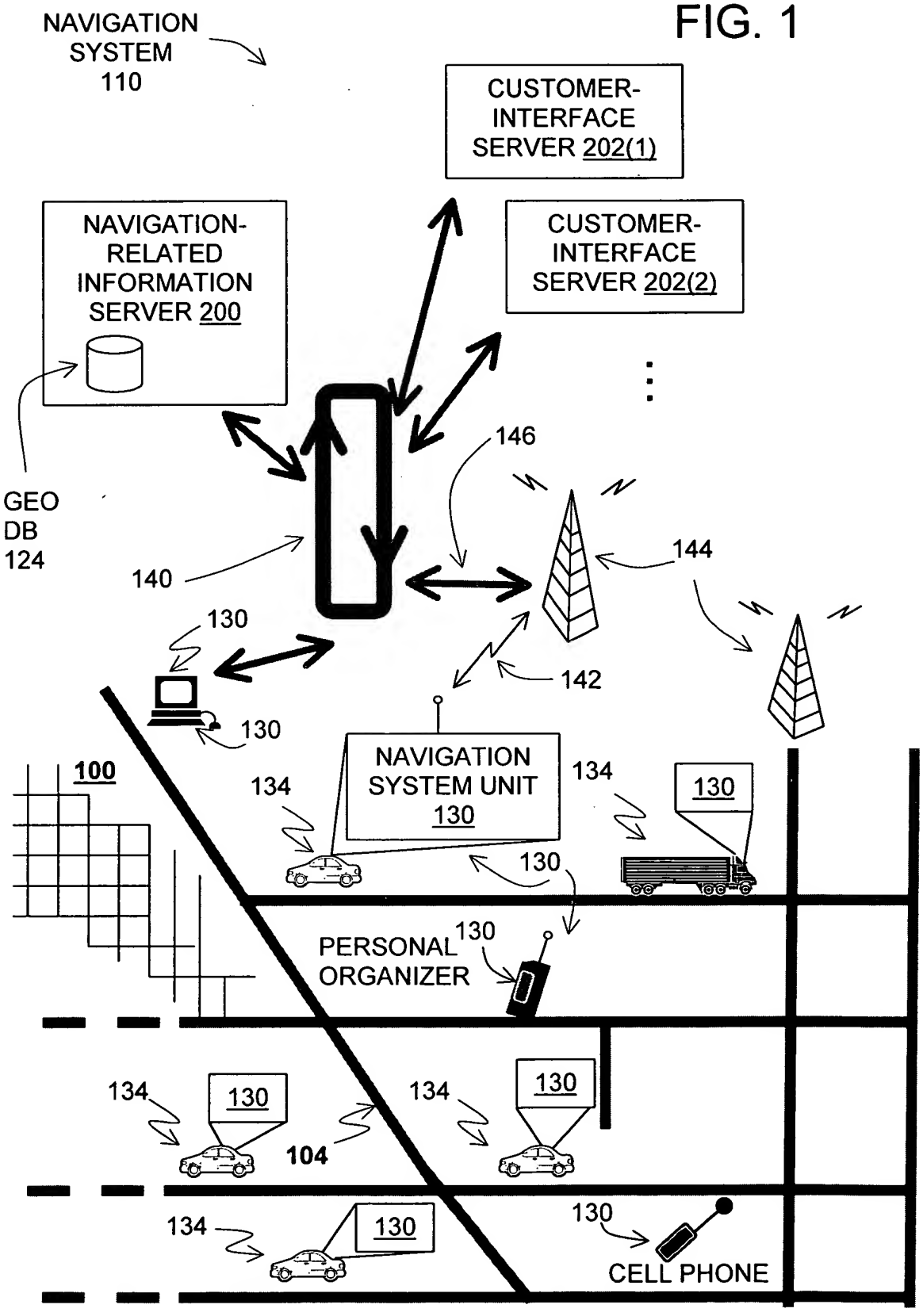
FIG. 1


NAVIGATION SYSTEM 110
CUSTOMER-INTERFACE SERVER 202(1)
NAVIGATION-RELATED INFORMATION SERVER 200
CUSTOMER-INTERFACE SERVER 202(2)
GEO DB 124
146
140
144
130
142
130
NAVIGATION SYSTEM UNIT 130
100
134
134
130
130
PERSONAL ORGANIZER
130
134
130
104
134
130
134
130
CELL PHONE

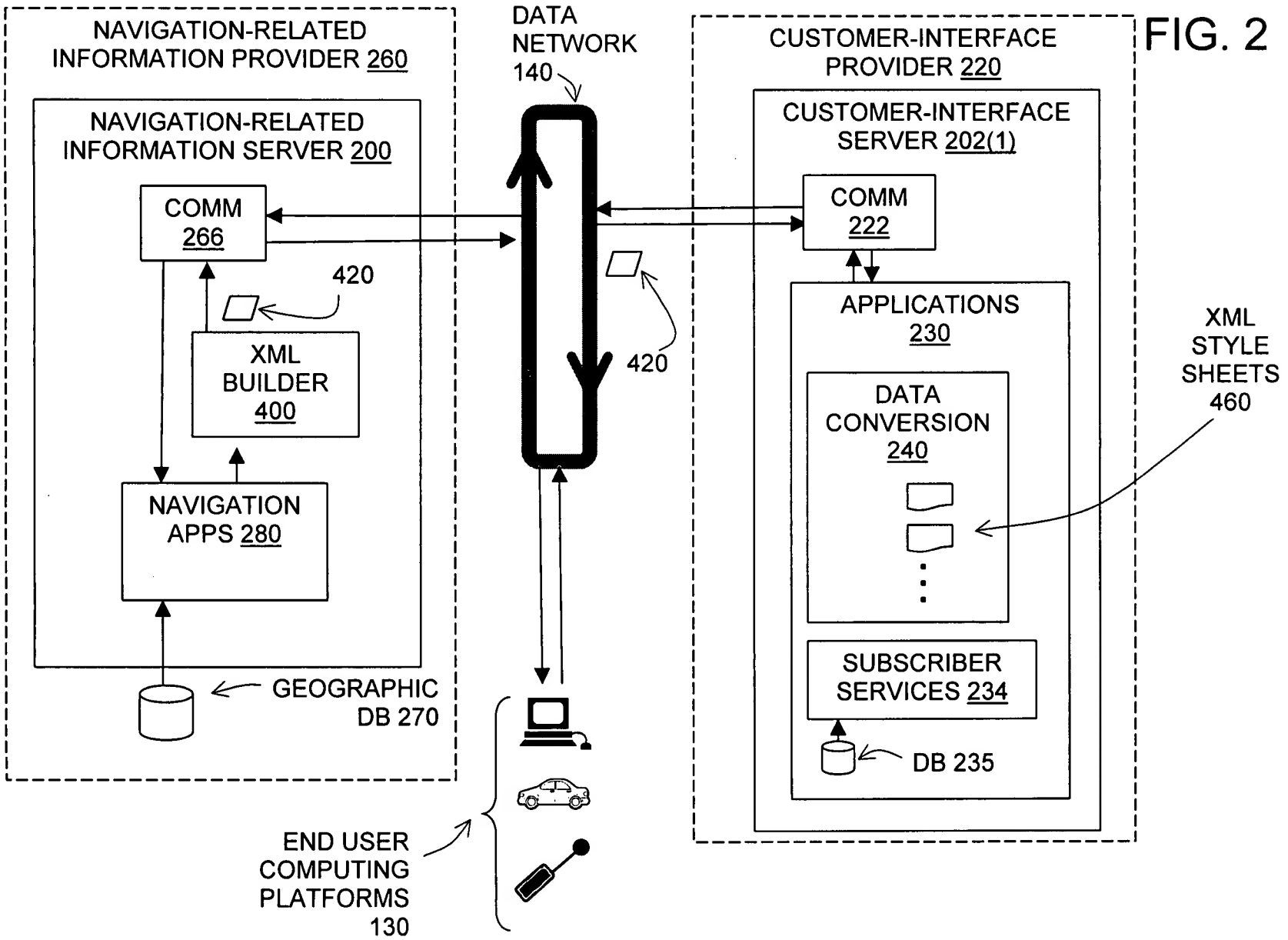

NAVIGATION-RELATED INFORMATION PROVIDER 260
NAVIGATION-RELATED INFORMATION SERVER 200
COMM 266
420
XML BUILDER 400
NAVIGATION APPS 280
GEOGRAPHIC DB 270
DATA NETWORK 140
420
CUSTOMER-INTERFACE PROVIDER 220
CUSTOMER-INTERFACE SERVER 202(1)
COMM 222
APPLICATIONS 230
DATA CONVERSION 240
SUBSCRIBER SERVICES 234
DB 235
XML STYLE SHEETS 460
END USER COMPUTING PLATFORMS 130

FIG. 2

FIG. 3

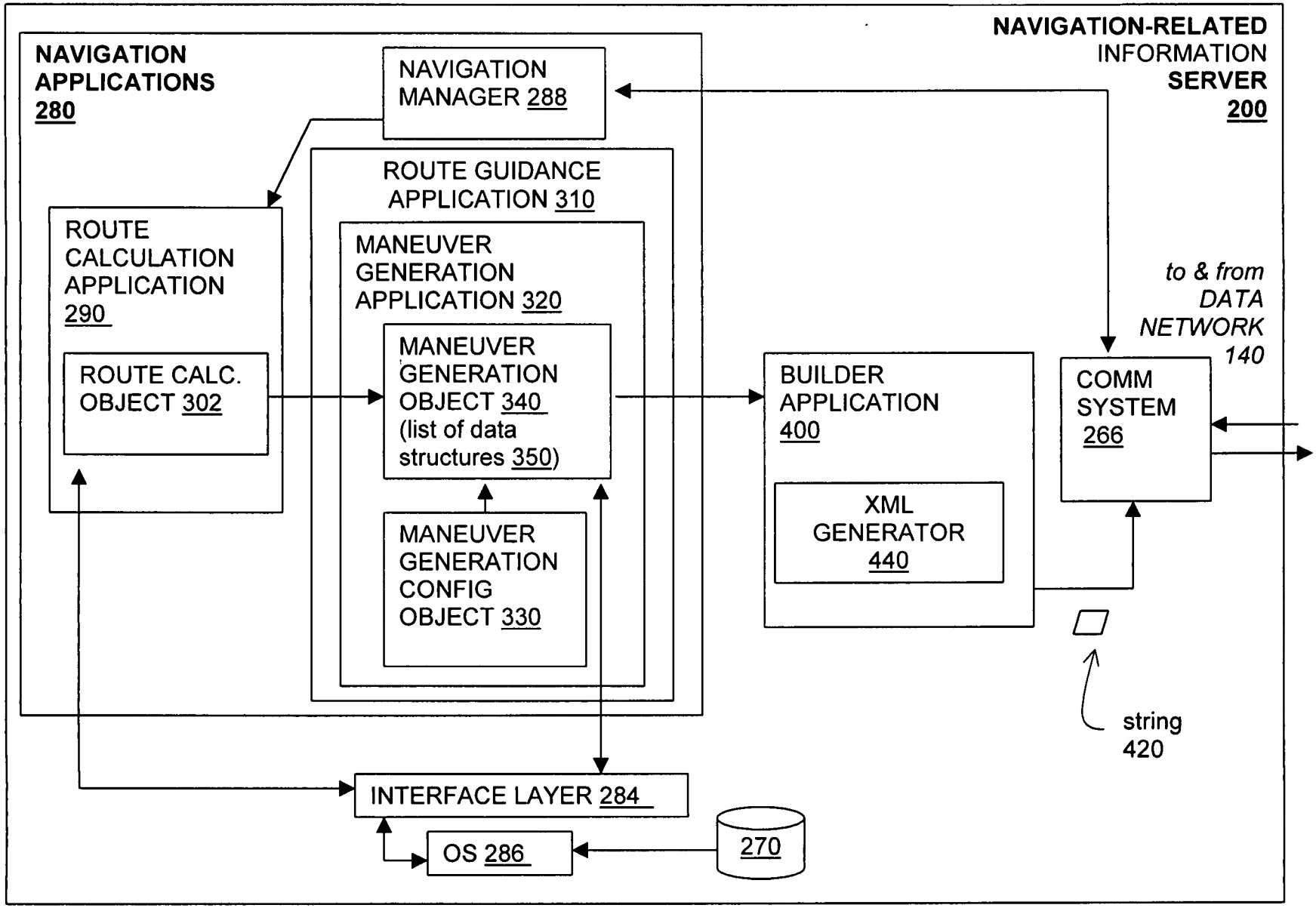
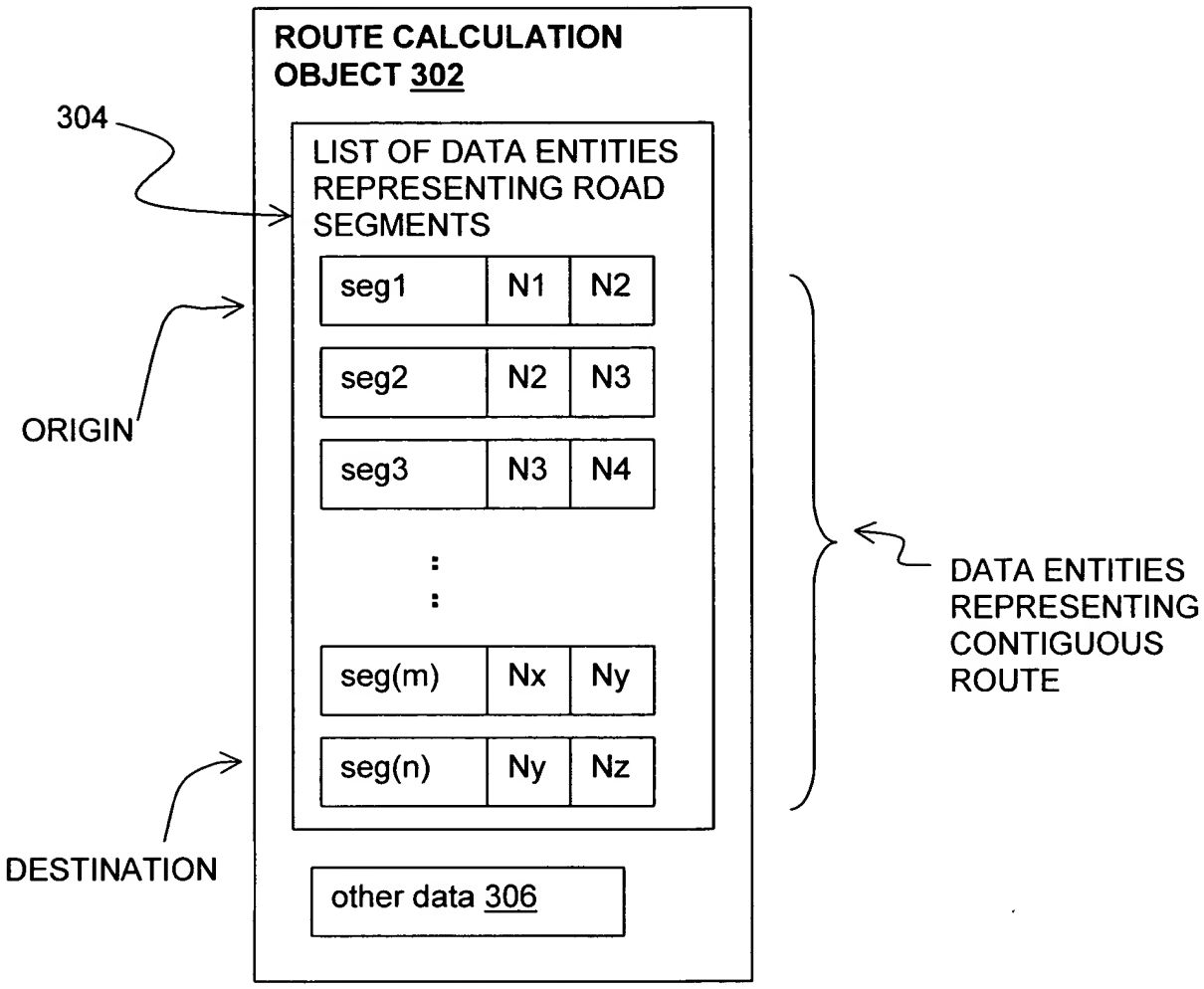

NAVIGATION APPLICATIONS 280
NAVIGATION MANAGER 288
NAVIGATION-RELATED INFORMATION SERVER 200
ROUTE GUIDANCE APPLICATION 310
ROUTE CALCULATION APPLICATION 290
ROUTE CALC. OBJECT 302
MANEUVER GENERATION APPLICATION 320
MANEUVER GENERATION OBJECT 340 (list of data structures 350)
MANEUVER GENERATION CONFIG OBJECT 330
BUILDER APPLICATION 400
XML GENERATOR 440
COMM SYSTEM 266
to & from DATA NETWORK 140
string 420
INTERFACE LAYER 284
OS 286
270

FIG. 4


ROUTE CALCULATION OBJECT 302
304
LIST OF DATA ENTITIES REPRESENTING ROAD SEGMENTS
seg1 N1 N2
seg2 N2 N3
seg3 N3 N4
seg(m) Nx Ny
seg(n) Ny Nz
ORIGIN
DESTINATION
DATA ENTITIES REPRESENTING CONTIGUOUS ROUTE
other data 306

PATENT Serial No.

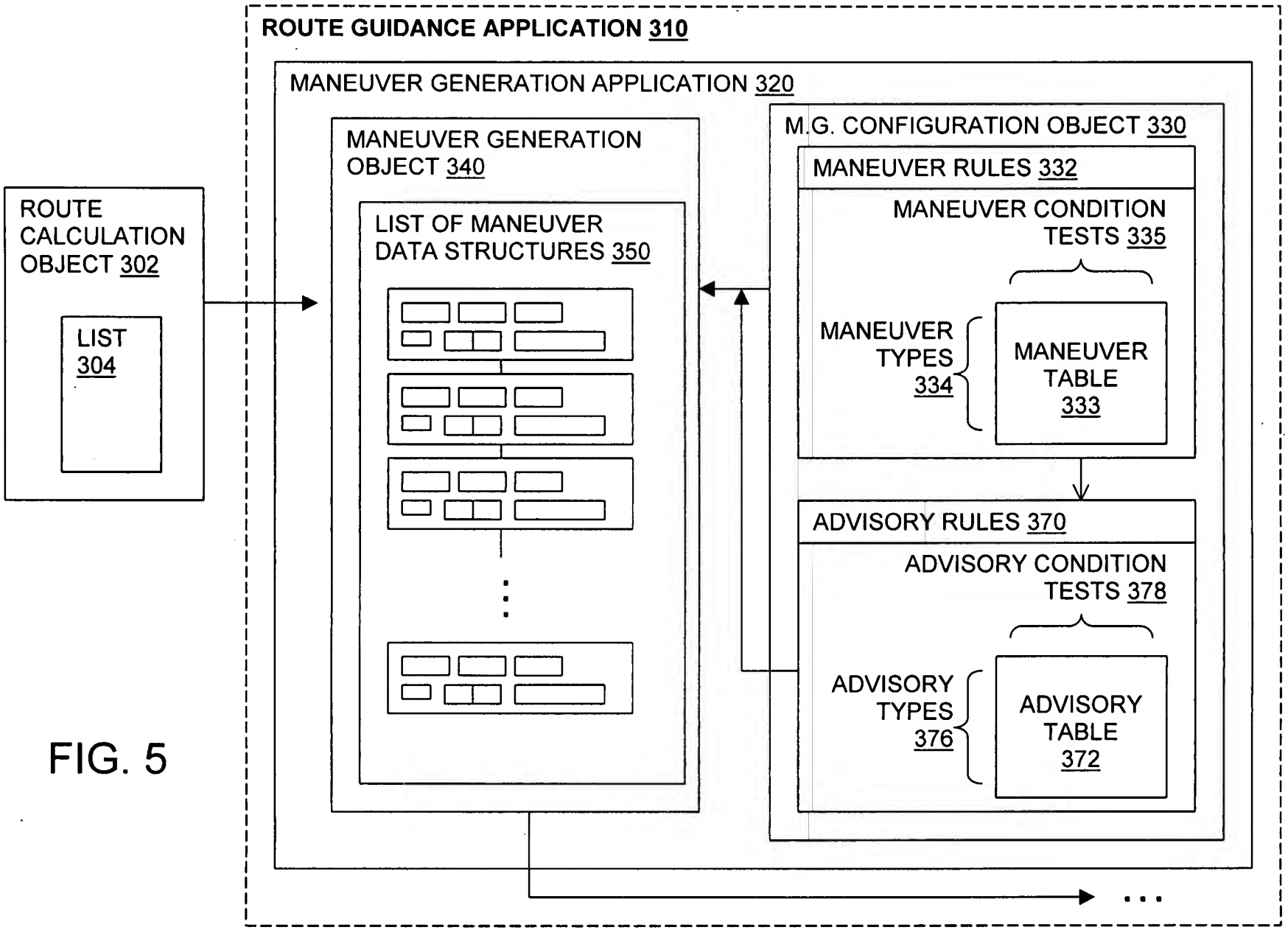



FIG. 5

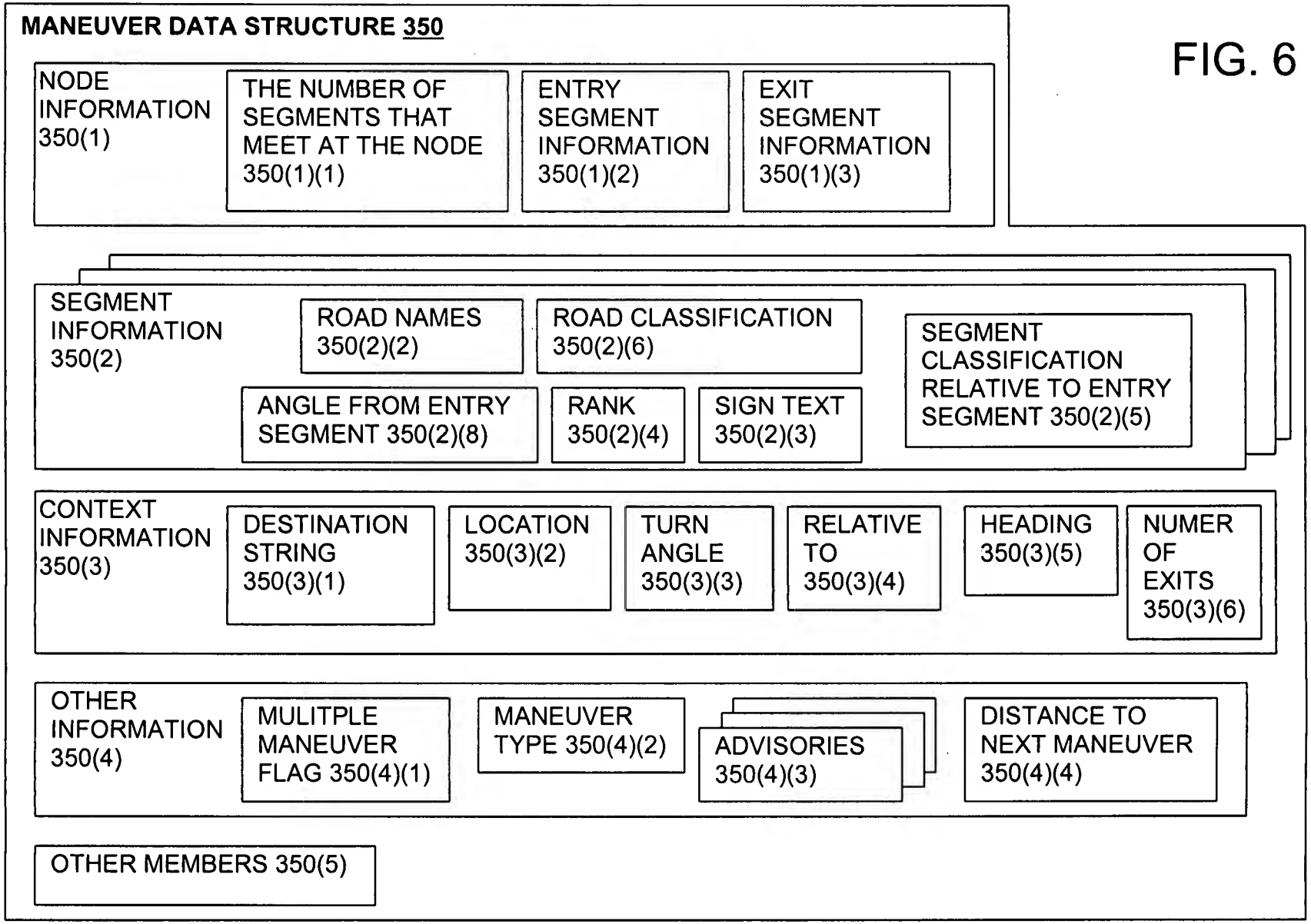

MANEUVER DATA STRUCTURE 350
NODE INFORMATION 350(1)
THE NUMBER OF SEGMENTS THAT MEET AT THE NODE 350(1)(1)
ENTRY SEGMENT INFORMATION 350(1)(2)
EXIT SEGMENT INFORMATION 350(1)(3)
SEGMENT INFORMATION 350(2)
ROAD NAMES 350(2)(2)
ROAD CLASSIFICATION 350(2)(6)
SEGMENT CLASSIFICATION RELATIVE TO ENTRY SEGMENT 350(2)(5)
ANGLE FROM ENTRY SEGMENT 350(2)(8)
RANK 350(2)(4)
SIGN TEXT 350(2)(3)
CONTEXT INFORMATION 350(3)
DESTINATION STRING 350(3)(1)
LOCATION 350(3)(2)
TURN ANGLE 350(3)(3)
RELATIVE TO 350(3)(4)
HEADING 350(3)(5)
NUMER OF EXITS 350(3)(6)
OTHER INFORMATION 350(4)
MULITPLE MANEUVER FLAG 350(4)(1)
MANEUVER TYPE 350(4)(2)
ADVISORIES 350(4)(3)
DISTANCE TO NEXT MANEUVER 350(4)(4)
OTHER MEMBERS 350(5)

FIG. 6